## <u>REMARKS</u>

Applicant has carefully reviewed and considered the Office Action mailed on December 20, 2006, and the references cited therewith.

Claims 1, 6, and 11 are amended, claims 4, 5, 9, 10, 14, 15 and 17 are canceled, and claims 22-24 are added; as a result, 1-3, 6-8, 11-13, 16, and 18-24 are now pending in this application.

## 35 USC §102 Rejection of the Claims

Claims 1-21 were rejected under 35 USC § 102(b) as being anticipated by U.S. Patent No. 5,995,486 to Iliadis ("Iliadis"). Applicant respectfully traverses this rejection.

Independent claims 1 and 6 are drawn to a method and apparatus, respectively, that hold transmission of additional data when a level of the data in a receive buffer reaches an adjustable high threshold. Claims 1 and 6 have been amended to incorporate subject matter from claims 4, 5, 9, and 10, namely, holding transmission of the additional data until the data in the receive buffer reaches an adjustable low threshold. Independent claim 11 similarly has been amended to incorporate the subject matter of claims 14 and 15 and now recites a storage medium having stored instructions that when executed result in adjusting the high threshold level and adjusting the low threshold level. One exemplary embodiment that uses adjustable high and low thresholds has the advantage of improving data flow control performance, for example, as described in the paragraphs 0046 and 0047 of the present application.

Applicant respectfully submits that Iliadis does not identically disclose all of the claimed elements and limitations recited in amended independent claims 1, 6 and 11. Although Iliadis mentions high and low thresholds H and L (see col. 2, lines 32-51), Iliadis is referring to the known mechanisms that use these "fixed thresholds H and L" (see col. 4, lines 65-67) (emphasis added). As understood by applicants, Iliadis does not disclose that the conventional high and low thresholds H and L are adjustable.

Although Iliadis mentions "variable thresholds at which start and stop signals controlling single connections are generated," Iliadis does not appear to disclose expressly that these variable thresholds are discrete high and low thresholds that are adjustable. As understood by applicants, instead of using fixed high and low thresholds, Iliadis uses a time dependent potential Title: DATA FLOW CONTROL IN A DATA STORAGE SYSTEM

Page 7 Dkt: P18315

function V(t) that represents a time dependent upper limit of the number of cells potentially occupying the buffer (i.e., a maximum possible buffer occupancy) after a period of delay D (see col. 3, lines 28-32, and col. 7, lines 31-35). Iliadis specifically contrasts the method of using the time dependent potential function V(t) (see Fig. 3) with the conventional method of using fixed high and low thresholds (see Fig. 2). Applicant submits therefore that Iliadis does not appear to disclose discrete high and low threshold levels that are adjustable and that are sensed by circuitry, as recited in independent claims 1, 6, and 11, nor does Iliadis disclose the separate adjustment of the high and low threshold levels, as recited in claim 11.

Independent claim 17 has been canceled and new independent claim 22 is drawn to a system comprising at least one receive buffer, buffer control circuitry and link layer circuitry that is compatible with a Serial Advanced Technology Attachment (SATA) protocol or a Serial Attached Small Computer Systems Interface (SAS) protocol. New independent claim 22 further recites that the buffer control circuitry is configured to sense when a level of data in the receive buffer reaches an adjustable high threshold level and the link layer circuitry is configured to send a hold command to a transmitting node currently sending data in response to the buffer control circuitry sensing that the level of data in the receive buffer reaches the adjustable high threshold level. Support for this new claim 22 (and new dependent claims 23 and 24) may be found in the present application, for example, in FIG. 2 and paragraphs 0019, 0022 and 0029.

Applicants submit that Iliadis does not identically disclose each and every element and limitation recited in new independent claim 22. In particular, Iliadis does not expressly disclose link layer circuitry compatible with a Serial Advanced Technology Attachment (SATA) protocol or a Serial Attached Small Computer Systems Interface (SAS) protocol.

Because Iliadis does not identically disclose each and every element and limitation recited in independent claims 1, 6, 11 and 22, applicants submit that Iliadis fails to anticipate these independent claims and the claims dependent therefrom. Accordingly, applicants request that the rejection under 35 U.S.C. 102 be withdrawn.

## Double Patenting Rejection

Claims 1, 6, 11, and 17 were provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-19 of copending

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Serial Number: 10/815,271

Filing Date: March 31, 2004

Title: DATA FLOW CONTROL IN A DATA STORAGE SYSTEM

Page 8 Dkt: P18315

Application No. 10/815,909. Independent claims 1, 6, and 11 have been amended to include

subject matter from dependent claims 4, 5, 9, 10, and 15, which have not been provisionally

rejected hereunder. Independent claim 17 is canceled. Accordingly, applicants request that the

obviousness-type double patenting rejection be withdrawn.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance and

notification to that effect is earnestly requested. The Examiner is invited to telephone

Applicant's attorney (603-668-6560) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account

No. 50-2121.

Respectfully submitted,

PAK-LUNG SETO ET AL.

By their Representatives,

**Customer Number: 45459** 

Telephone Number: 603-668-6560

by: /Kevin J. Carroll/

Kevin J. Carroll

Reg. No. 36,384